CE11 Concept Issues

- How are multiple streams of traffic coordinated?
  - RTA needed to initially coordinate?
  - Spacing and sequence only?
  - Combination of RTA and spacing/sequence?
  - RTA all the way?
  - Sequence only?

- How do we manage deviations in the merging or spacing interval?
  - Do aircraft need to maneuver to give more spacing control than the speed DOF alone?
  - Is maneuvering DOF sometimes preferred over speed DOF, even for small control adjustments?

- If maneuvering is needed, how should maneuvering be done?
  - FAST approach: fanning, base extension, corner-cutting DOFs, built in to on to onboard automation
  - TAP solution: change path with ground tool, then uplink
  - Manual with flight guidance?

- Can mixed operations be handled in the same stream?

- How are multiple merge points handled?

- What are the airspace design issues in facilitating merging and spacing?
  - Are specific merge points required?
  - Maneuver corridors needed? How to design?

- What kinds of constraints are needed on the en route operations to facilitate CE-11?
  - Crossing accuracy?

- What are procedures for building an unscheduled gap into the stream?

- How are aircraft with differing performance handled?

- What are the data exchange requirements?

- How do we design concept to accommodate a non-conforming aircraft?

- Is front-loading required to achieve benefits, or does CE-11 achieve its benefits without the need for front-loading?

- How do we design concept to accommodate dependent operations?

- How does the ATSP maintain responsibility for separation in the CE-11 environment? What are the concept design implications?
  - In-trail
  - Merging
  - Maneuvering